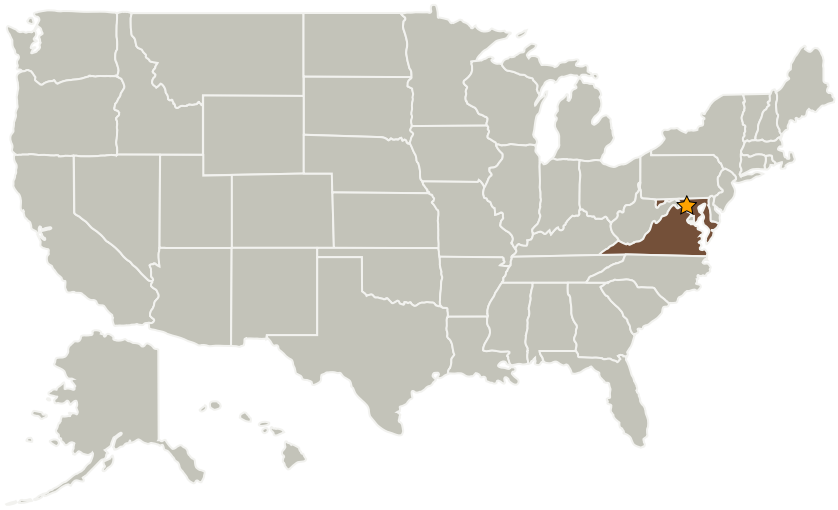
# Small Satellite Transceiver for Launch Vehicles, Phase I

Completed Technology Project (2007 - 2007)

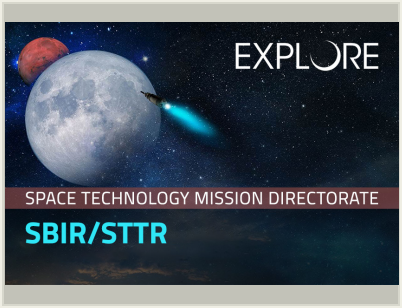
## Project Introduction

NAL Research Corporation proposes to develop a small, light-weight, low-cost transceivers capable of establishing satellite communications links for telemetry and control during the launch and ascent stages of flight. The proposed transceiver will offer continuous and truly global coverage. When data are sent from a launch vehicle, the signals are received immediately by one of the LEO satellites and relayed in real-time to command and control center via either Public Switched Telephone Network/Public Data Networks (PSTN/PDN), directly to another transceiver, through the Internet or through a direct IP address. The entire process can take a fraction of a second. This will provide electronic global access to airborne vehicles from any place.

## Primary U.S. Work Locations and Key Partners



| Organizations Performing Work | Role | Type | Location |
|---|---|---|---|
| ★Goddard Space Flight Center(GSFC) | Lead Organization | NASA Center | Greenbelt, Maryland |
| NAL Research Corporation | Supporting Organization | Industry | Manassas, Virginia |

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## Organizational Responsibility

**Responsible Mission Directorate:**

Space Technology Mission Directorate (STMD)

**Lead Center / Facility:**

Goddard Space Flight Center (GSFC)

**Responsible Program:**

Small Business Innovation Research/Small Business Tech Transfer

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| Primary U.S. Work Locations | |
|---|---|
| Maryland | Virginia |

## Project Management

**Program Director:**

Jason L Kessler

**Program Manager:**

Carlos Torrez

## Technology Areas

**Primary:**

- TX07 Exploration Destination Systems
  - TX07.2 Mission Infrastructure, Sustainability, and Supportability
    - TX07.2.4 Micro-Gravity Construction and Assembly